

11	20	29	38	47	56
5' GCGCC ATC AGC CGC CCG GGA GAT ATC CGC CGG GGG AGA ATA GGG TTG CAC CAT CCC					
65	74	83	92	101	110
AGA AGC TGC TGT TAG CTC GCC GGT CCT CGG CAC GCC GCC CGT TCG CCC CTG CGC					
119	128	137	146	155	164
TGT CCG CCC TTC CCC TAG CGT TAC TTC CGG TCC CTC GCT GAG GGG GTT CGT GCG					
173	182	191	200	209	218
GCT CCC AGG AGG CGT GAA CCG CGG ACC ATG AGC GTG GGC TTC ATC GGG GCC GGC					
		M	S	V	G
			F	I	G
				A	G
227	236	245	254	263	272
CAG CTG GCC TAT GCT CTG GCG CGG GGC TTC ACG GCC GCA GGC ATC CTG TCG GCT					
Q	L	A	Y	A	L
		A	R	G	F
		T	A	A	G
				I	L
				S	A
281	290	299	308	317	326
CAC AAG ATA ATA GCC AGC TCC CCA GAA ATG AAC CTG CCC ACG GTG TCC GCG CTC					
H	K	I	I	A	S
		S	P	E	M
		N	L	P	T
				V	S
				A	L
335	344	353	362	371	380
AGG AAG ATG GGT GTG AAC CTG ACA CGC AGC AAC AAG GAG ACG GTG AAG CAC AGC					
R	K	M	G	V	N
		L	T	R	S
				E	K
				T	V
				H	S
389	398	407	416	425	434
GAC GTC CTG TTT CTG GCT GTG AAG CCA CAT ATC ATC CCC TTC ATC CTG GAT GAG					
D	V	L	F	L	A
		V	K	P	H
			I	I	P
				F	I
				L	D
				E	

FIGURE 1A



443	452	461	470	479	488
ATT GGG GCC GAC GTG CAA GCC AGA CAC ATC GTG GTC TCC TGT GCG GCT GGT GTC					
I G A D V Q A R H I V V S C A A G V					
497	506	515	524	533	542
ACC ATC AGC TCT GTG GAG AAG AAG CTG ATG GCA TTC CAG CCA GCC CCC AAA GTG					
T I S S V E K K L M A F Q P A P K V					
551	560	569	578	587	596
ATT CGC TGC ATG ACC AAC ACA CCT GTG GTA GTG CAG GAA GGC GCT ACA GTG TAC					
I R C M T N T P V V V Q E G A T V Y					
605	614	623	632	641	650
GCC ACG GGC ACC CAT GCC CTG GTG GAG GAT GGG CAG CTC CTG GAG CAG CTC ATG					
A T G T H A L V E D G Q L L E Q L M					
659	668	677	686	695	704
AGC AGC GTG GGC TTC TGC ACT GAG GTG GAA GAG GAC CTC ATC GAT GCC GTC ACG					
S S V G G F C T E V E E D L I D A V T					
713	722	731	740	749	758
GGG CTC AGT GGC AGC GGC CCT GCC TAT GCA TTC ATG GCT CTG GAC GCA TTG GCT					
G L S G S G P A Y A F M A L D A L A					
767	776	785	794	803	812
GAT GGT GGC GTG AAG ATG GGT TTG CCA CGG CGC CTG GCA ATC CAA CTC GGG GCC					
D G G V K M G L P R R L A I Q L G A					

FIGURE1B

821	830	839	848	857	866
CAG GCT TTG CTG GGA GCT GCC AAG ATG CTG CTG GAC TCG GAG CAG CAT CCA TGC					
Q A L L G A A K M L L D S E Q H P C					
875	884	893	902	911	920
CAG CTT AAG GAC AAT GTC TGC TCC CCT GGG GGA GCC ACC ATC CAC GCC CTG CAC					
Q L K D N V C S P G G A T I H A L H					
929	938	947	956	965	974
TTT CTA GAG AGT GGG GGC TTC CGC TCT CTG CTC ATC AAT GCA GTT GAG GCC TCC					
F L E S G G G F R S L L I N A V E A S					
983	992	1001	1010	1019	1028
TGT ATC CGA ACA CGA GAG CTA CAG TCC ATG GCC GAC CAA GAA AAG ATC TCC CCA					
C I R T R E L Q S M A D Q E K I S P					
1037	1046	1055	1064	1073	1082
GCT GCC CTT AAG AAG ACC CTC TTA GAC AGA GTG AAG CTG GAA TCC CCC ACA GTC					
A A L K K T L L D R V K L E S P T V					
1091	1100	1109	1118	1127	1136
TCC ACA CTG ACC CCC TCC AGC CCA GGG AAG CTC CTC ACA AGA AGC CTG GCC CTG					
S T L T P S S P G K L L T R S L A L					
1145	1154	1163	1172	1181	1190
GGA GGC AAG AAG GAC TAA GGC AGC ATC TGT CCC CTC TGT GAT TCA GAG CCC TTA					
G G K K D					

FIGURE 1C

1199	1208	1217	1226	1235	1244
GTT GAG AGC CCC TGC CGC CCC TGC CAC CCC CCT GCC CCG CTC CCA CCA TTG CCC					
1253	1262	1271	1280	1289	1298
CTC CTC AGC TGT GCA AGG AGA AAG CAT GCT TAG GAA GTT TTC AGG TCC TTG TGA					
1307	1316	1325	1334	1343	1352
TAA AAC CTC CTT AAA TCT GTT CAG ACC AAG CAA TGC GAG CTT CCT CTC CTG TCC					
1361	1370	1379	1388	1397	1406
CAT GTT GGA AGT TGC TCT GAA GGG GTG GTA GAT GCT GGA AGC CAG ACA CAA CCC					
1415	1424	1433	1442	1451	1460
TGC GTA CGC TGC TCA GTT GGT GGA GAC TGG GGC TGG GAC TGG AGT CAG CCC AGC					
1469	1478	1487	1496	1505	1514
TGG GAG GAG GGG CTG GGG AGG AGC ATC TGC AGC TGA AGC CCG AGG CAG GGT TGG TGT					
1523	1532	1541	1550	1559	1568
GAT GCC AAG GCA AAG TGG TGA GGA GAA AAC AGG AAA CCG GCT TTC TCT GAA TTG					
1577	1586	1595	1604	1613	1622
GTA AAT GGG AAA GAA GTG AGC AAC TTA AGA TTG TCA CAA TTA ATC ACA AGT GTA					
1631	1640	1649	1658	1667	1676
CAG GAT TAG ACT GGG TTT ATA TTT AAC TCT TGC TTC ATA GGT GTA CCA TTT AAA					

FIGURE 1D

1685 1694 1703 1712 1721 1730
GAG TGT TAT TTA ATG CTA AGT TTA ACT GCT TTA ATA AAG TTT ATT TTT AAA TAT

1739
CAA AAA AAA AAA 3'

FIGURE 1E

1	M	S	V	G	F	I	G	A	G	Q	L	A	Y	A	L	A	R	G	F	T	A	A	G	I	L	S	A	H	K	I	I	A	S	S	P	2278458
1	M	S	V	G	F	I	G	A	G	Q	L	A	F	A	L	A	K	G	F	T	A	A	G	V	L	A	A	H	K	I	M	A	S	S	P	g189498
36	E	M	N	L	P	T	V	S	A	L	R	K	M	G	V	N	L	T	R	S	N	K	E	T	V	K	H	S	D	V	L	F	L	A	V	2278458
36	D	M	D	L	A	T	V	S	A	L	R	K	M	G	V	K	L	T	P	H	N	K	E	T	V	Q	H	S	D	V	L	F	L	A	V	g189498
71	K	P	H	I	I	P	F	I	L	D	E	I	G	A	D	V	Q	A	R	H	I	V	V	S	C	A	A	G	V	T	I	S	S	V	E	2278458
71	K	P	H	I	I	P	F	I	L	D	E	I	G	A	D	I	E	D	R	H	I	V	V	S	C	A	A	G	V	T	I	S	S	I	E	g189498
106	K	K	L	M	A	F	Q	P	A	P	K	V	I	R	C	M	T	N	T	P	V	V	V	Q	E	G	A	T	V	Y	A	T	G	T	H	2278458
106	K	K	L	S	A	F	R	P	A	P	R	V	I	R	C	M	T	N	T	P	V	V	R	E	G	A	T	V	Y	A	T	G	T	H	g189498	
141	A	L	V	E	D	G	Q	L	L	E	Q	L	M	S	S	V	G	F	C	T	E	V	E	E	D	L	I	D	A	V	T	G	L	S	G	2278458
141	A	Q	V	E	D	G	R	L	M	E	Q	L	L	S	T	V	G	F	C	T	E	V	E	E	D	L	I	D	A	V	T	G	L	S	G	g189498
176	S	G	P	A	Y	A	F	M	A	L	D	A	L	A	D	G	G	V	K	M	G	L	P	R	R	L	A	I	Q	L	G	A	Q	A	L	2278458
176	S	G	P	A	Y	A	F	T	A	L	D	A	L	A	D	G	G	V	K	M	G	L	P	R	R	L	A	V	R	L	G	A	Q	A	L	g189498
211	L	G	A	A	K	M	L	L	D	S	E	Q	H	P	C	Q	L	K	D	N	V	C	S	P	G	G	A	T	I	H	A	L	H	F	L	2278458
211	L	G	A	A	K	M	L	L	H	S	E	Q	H	P	G	Q	L	K	D	N	V	S	S	P	G	G	A	T	I	H	A	L	H	V	L	g189498

FIGURE 2A

246	E	S	G	G	F	R	S	L	L	I	N	A	V	E	A	S	C	I	R	T	R	E	L	Q	S	M	A	D	Q	E	K	I	S	P	A	2278458
246	E	S	G	G	F	R	S	L	L	I	N	A	V	E	A	S	C	I	R	T	R	E	L	Q	S	M	A	D	Q	E	Q	V	S	P	A	g189498
281	A	L	K	K	T	L	L	D	R	V	K	L	E	S	P	T	V	S	T	L	T	P	S	S	P	G	K	L	L	T	R	S	L	A	L	2278458
281	A	I	K	K	T	I	L	D	K	V	K	L	D	S	P	A	G	T	A	L	S	P	S	G	H	T	K	L	L	P	R	S	L	A	P	g189498
316	G	G	K	K	D																												2278458			
316	A	G	K	-	D																												g189498			

FIGURE 2B